

- [•] means for exchanging said information between locks and keys.
- (Amended) The access control system according to claim 1, wherein
 [•] the information concerning access rights of a key includes one or more tokens and[/or] the information designated for other keys and[/or] locks includes one or more messages for said keys and[/or] locks.
- 3. (Amended) The access control system according to [any of the preceding claims] claim 1, wherein
 - [•] the memory means in the key and[/or] the lock stores at least a partial view of the system and
 - [•] the exchanging means triggers an update of said view.
- 4. (Amended) The access control system according to claim[s] 3, wherein[•] the update triggered by the exchanging means is performed off-line, particularly right after said exchanging means has completed its function.
- (Amended) The access control system according to [any of the preceding claims] claim 1, wherein
 [•] the information designated for other keys and[/or] locks includes one or more messages for said other keys and[/or] locks and is exchanged off-line between a
 - key and a lock.
- 6. (Amended) The access control system according to [one or more of the preceding claims] claim 1, wherein
 - [•] the means for exchanging information between a lock and a key are

activated when said key is engaged with said lock.

- 7. (Amended) A key for use in an access control system according to [any one of the preceding claims] claim 1, wherein
 - [•] the memory means includes a read/write section dedicated to the information designated for other keys and/or locks.
- 8. (Amended) The key according to claim 7, characterized by
- [•] a power source, preferably being rechargeable when said key is used with a lock.
- 9. (Amended) A lock for use in an access control system according to [any one of the claims] <u>claim</u> 1 [to 6,] wherein the memory means includes a read/write section dedicated to the information designated for other keys and/or locks.
- 10. (Amended) The lock according to claim 9, characterized by

 [•] a power source, preferably being rechargeable when a key is used with said lock.
- 11. (Amended) A method for propagating information in an electronic lock-andkey system, characterized in that
 - [•] an original message to be propagated to an *n-th* lock or key is inserted into a memory of a first lock or a first lock, respectively,
 - [•] on any use of said first key or said first lock, said original message is copied] into a memory of a second lock or key, respectively, but said original message remains in said first lock's or first key's, respectively, memory,
 - [•] on any subsequent use of said first and[/or] second key and[/or] said first and[/or] second lock, said original message is copied into a memory of a next

lock or key, respectively, but remains in the memories of said previously used locks and [/or] keys, respectively, until said original message, propagated in the described snowball-like way, reaches its destination, i.e. said *n-th* lock or key.

12. (Amended) A method for propagating information in an electronic lock-andkey system,

characterized in that

- [•] an original message to be propagated to an *n-th* lock or key is stored in a memory of a first lock,
- [•] when a first key is used with said first lock[, said original message is copied] into said first key's memory, but remains in said first lock's memory,];
- [•] when said first key is used with a second lock, said original message copied] into said second lock's memory, but remains in said first key's memory,
- [•] when a second key is used with said second lock[, said original message is copied] into said second key's memory, but remains in said second lock's memory,
- [•] until said original message, propagated in the described way, reaches [its destination, i.e. said n-th lock or key.
- 13. (Amended) The method for propagating information according to claim 11 [or claim 12], further characterized in that the *n-th* lock or key produces a confirmation message acknowledging reception of said original message, which said confirmation message serves to control erasing of the copies of the original message in the [memories] of the locks and keys.

Please and the following claims:

-- 19. A computer readable program embodied in a storage media including computer readable program instructions for controlling propagation of information in an electronic lock-and-key system, said storage media comprising:

computer readable program instructions to store an original message to be propagated to an n-th lock or key in a memory of a first lock;

computer readable program instructions to control when a first key is used with said first lock, said original message is copied into said first key's memory, but remains in said first lock's memory;

computer readable program instructions to control when said first key is used with a second lock, said original message is copied into said second lock's memory, but remains in said first key's memory; and

computer readable program instructions to control when a second key is used with said second lock, said original message is copied into said second key's memory, said original message remains in said second lock's memory until said original message is propagated to said n-th lock or key.

- 20. The storage media of claim 19, further comprising computer readable program instructions to control said n-th lock or key to produce a confirmation message acknowledging reception of said original message, said confirmation message serves to control erasing of the original message in the memories of said locks and keys.
- 21. The storage media of claim 20, further comprising computer readable program instructions to control said confirmation message is propagated through said system the same as said original message.

- 22. The storage media of claim 19, further comprising computer readable program instructions for selectively or universally erasing copies of said original message after a time-out.
- 23. The storage media of claim 19, further comprising computer readable program instructions for ordering said original messages and confirmation messages.
- 24. The storage media of claim 23, further comprising computer readable program instructions for erasing a message of a lower order when a message of higher order is received by said lock or key during propagation.
- 25. The storage media of claim 19, further comprising computer readable program instructions for encrypting original messages and confirmation messages using an encryption scheme.